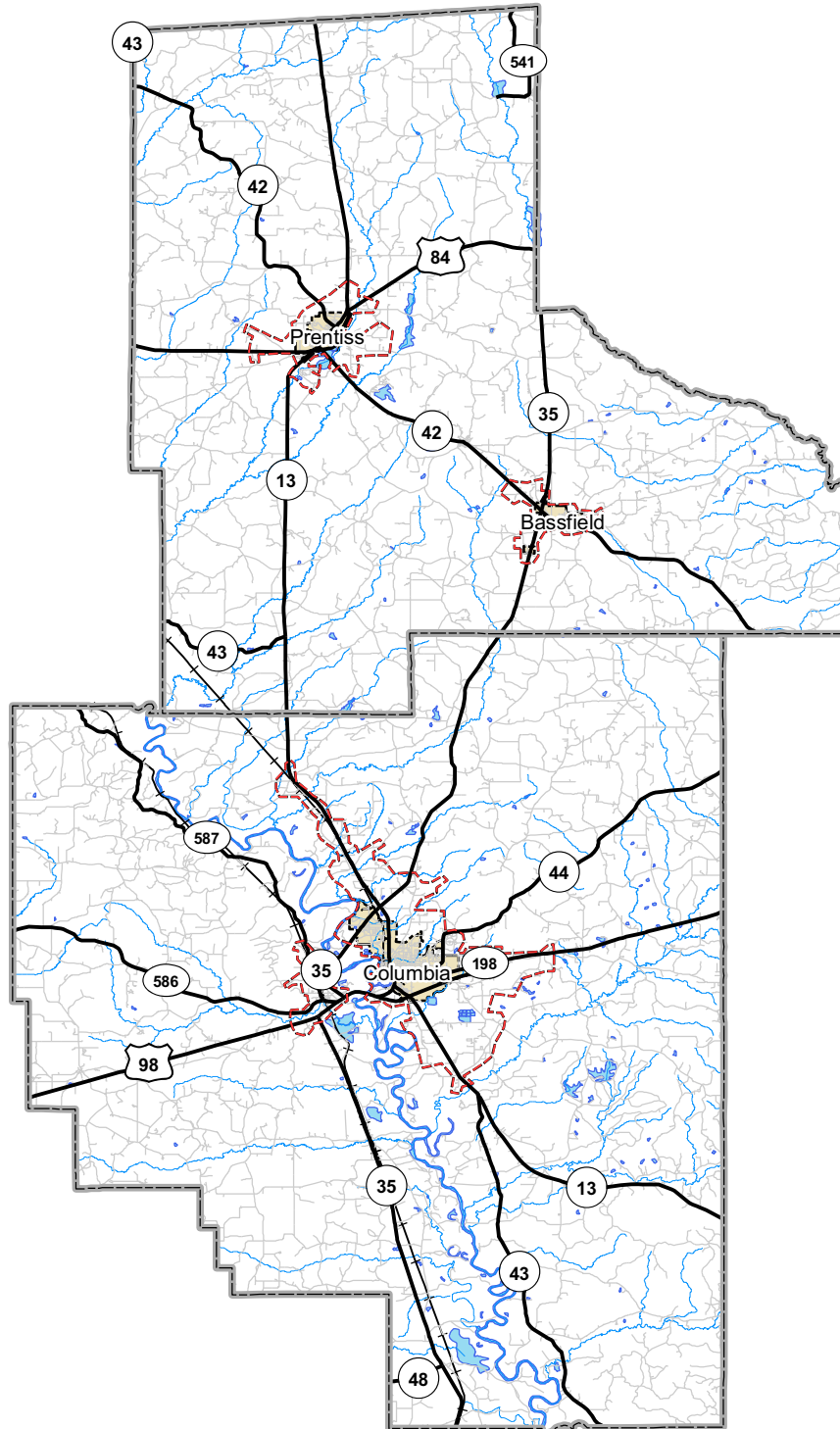


JEFFERSON DAVIS COUNTY, MISSISSIPPI MARION COUNTY, MISSISSIPPI

COUNTY WILDFIRE PROTECTION PLAN



OCTOBER 2008

PREPARED BY SOUTHERN MISSISSIPPI PLANNING AND DEVELOPMENT DISTRICT
WITH FUNDING PROVIDED BY THE MISSISSIPPI FORESTRY COMMISSION

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Introduction

In late 2006, the Mississippi Forestry Commission and The Nature Conservancy commissioned the preparation of wildfire protection plans for a fifteen-county south Mississippi region. The plan is an effort to address changes to the Wildland-Urban Interface (WUI) brought about by Hurricane Katrina as well as from increased development in many parts of the region in recent years. While some downed timber was salvaged, an increased risk of future wildfire remains a threat because of residual debris.

The Wildland-Urban Interface, where structures and other developments merge with undeveloped wildland or vegetative fuels, can create one of the most dangerous and complex situations for firefighters. The WUI zone can pose a significant risk to communities in the event of a large-scale wildfire. In a proactive effort to address these increased risks and others, Wayne County has agreed to create a County Wildfire Protection Plan (CWPP). A CWPP can reduce the potential for loss in the event of a wildfire by identifying priorities for the protection of life, property and critical infrastructure within the WUI.

With 5 plans already completed by the end of 2007, SMPDD officials began gathering geographical data, historical fire information, etc. for Jefferson Davis and Marion County in early 2008. Planners then met with the local county fire coordinator to review the information and obtain input on the strengths and weaknesses of the county fire departments and their ability to fight wildfires. Later, a Steering Committee was formed through cooperation of local, state and federal agencies, and other interested parties. The Steering Committee included a subcommittee of members from the Jefferson Davis- Marion County Emergency Management Agency, the Mississippi Forestry Commission, the County Fire Coordinator, and Volunteer Fire Departments.

Over the next several months the Steering Committee, with the opportunity for public input, produced a County Wildfire Protection Plan. The Plan includes several components: Geographic Information System produced maps, a County Risk Assessment, a Mitigation Projects List, Structure Ignitability Recommendations and an Action Plan and Assessment Strategy. It is the intent of the Steering Committee that this plan will guide development and educate landowners, as well as address and then treat at-risk wildfire areas within the County.

This plan was developed with an effort toward consistency with the Healthy Forests Restoration Act of 2003, the county's Hazard Mitigation Plan (currently under final review by MEMA/FEMA) and the Comprehensive Emergency Management Plan.

Area Description

Marion County and Jefferson Davis County are located in south central Mississippi. Jefferson Davis County is located in the northwest corner of the Southern Mississippi Planning and Development District. It is rural in context, with the Town of Prentiss being the largest municipality. The only other incorporated area in the county is the Town of Bassfield. Marion County is located in the west-central portion of the Southern Mississippi Planning and Development District. It is rural in character, with the City of Columbia being the only incorporated municipality among other, smaller unincorporated communities. The two counties encompass 960 square miles. Jefferson Davis County borders the neighboring Mississippi counties of Marion, Lawrence, Simpson, Covington and Lamar. Marion County borders the neighboring Mississippi counties of Jefferson Davis, Walthall, Lawrence, Lamar and Pearl River and Washington Parish, Louisiana.

In Jefferson Davis County, State Highway 13 provides access to the north and south. State Highway 42 travels through Bassfield and Prentiss in a northwesterly direction. U.S. Highway 84, which crosses east and west through Prentiss, provides direct access to U.S. Highway 49 and Interstate 59 to the east and to the City of Natchez to the west.

Traveling through the City of Columbia in Marion County, the primary transportation route is U. S. Highway 98. The highway provides direct access to the City of Hattiesburg to the east and the City of McComb to the west. State Highways 13, 35, and 43 provide the county with adequate access to the north and south.

Based on census data, Jefferson Davis County was the only county in the Southern Mississippi Planning and Development District that lost population during the 1990s. The 2000 U.S. Census reported a population of 13,962 in Jefferson Davis County, a 0.6% decrease from 1990. With a projected 2006 estimate of 12,749, the trend toward declining population seems to be continuing. However, the Mississippi Development Authority 2011 projection shows a modest increase of about 6%.

The population of Marion County in the 2000 census was 25,595 people. This figure indicates slight growth, 0.2%, in residency since 1990, a minor reversal of the .6% decrease recorded for the 1980-1990 interval. Projections for 2006 estimate a slight decrease in Marion County's population at 25,550; but Mississippi Development Authority projections for 2011 show a 7 % increase. Estimated current population of the City of Columbia is 6600.

Jefferson Davis County contains 408.4 square miles, with land largely held by private landowners. Approximately 55% of the county land area is contained within commercial forests. Recreational activities in the area are served by Lake Jeff Davis and The Long Leaf Trace. Lake Jeff Davis is a 164-acre lake and is one of 21 state fishing lakes operated by the Mississippi Department of Wildlife, Fisheries and Parks. The Long Leaf Trace, a converted track of rail road, offers residents a 37 mile nature trail for walking, biking, or horseback riding.

Marion County contains 548 square miles, with land largely held by private land owners. Approximately 60% of the county land area is contained within commercial forests. The County offers a variety of recreational activities, most of which can be enjoyed nearly year-round. In addition to area lakes, campgrounds, hunting sites, playgrounds, sports fields and picnic areas, Marion County features several family-friendly recreation sites including Columbia Water Park, Columbia City Park and the Columbia Exposition Center.

The climate of Jefferson Davis and Marion Counties is mild with the mean annual temperature in the mid 60's. Average winter temperatures range from 37 to 59 degrees Fahrenheit with summer temperatures ranging from 71 to 92 degrees Fahrenheit. Rainfall averages approximately 59 inches in Jefferson Davis County and 64 inches in Marion County annually with the majority of accumulation from November to July. Because of high annual precipitation amounts, the Counties are not usually prone to property damaging wildfires. Occasionally, however, drought-like conditions prompt fire service officials to issue bans against burning and encroachment of urban development into wildlands becomes more of a concern. County wind speeds are generally less than 10 miles per hour, but often increase during storms. Thunderstorms occur frequently and are sometimes accompanied by strong to severe winds, including tornadoes.

About 60 percent of the land in Jefferson Davis County and Marion County is use-classified as timber, open, or agriculture, creating an enhanced risk to the county of wildfires. Streams and drainage basins create natural barriers that help reduce this risk. Woodlands fires are controlled by rural firefighting departments and/or forestry service personnel. Based on historical occurrences, wildfires can be expected annually in the less urbanized parts of the county. It is the threat of a spread of rural wildfires to the urban fringe that poses the greatest concern. Mitigation measures such as prescribed burns, training and equipping firefighters, and public education on fire protection and Firewise strategies all help to control the risk to life and property.

While climate conditions and debris can cause ignitability, certain industrial operations and facilities can also raise the threat of fire. Major transportation arteries through Jefferson Davis County such as U. S. Highway 84 and MS Highways 13 and 42 and in Marion County; U.S. Highway 98 and MS Highways 13, 35, and 43 are used daily to transport flammable, toxic and/or explosive materials, thus exposing the county to potential transportation incidents involving hazardous and/or flammable materials. Several facilities located within the Counties use, store, or process flammable, toxic, and/or explosive materials. In addition, there are several wells and pipelines spanning Jefferson Davis and Marion Counties which contain natural gas, petroleum, and other substances. Volunteer fire departments within the Counties serve as first responders if an incident involving hazardous materials occurs.

Jefferson Davis County is served by seven volunteer fire departments. The Prentiss Fire Department has three full-time firefighters and twenty-three volunteers. Equipment includes two pumper trucks, one tanker, and a rescue truck equipped with Jaws of Life

capability. Prentiss has a fire insurance class rating of 7. Other county fire departments include Granby, 84 West, Clem, Good Hope, Oakvale, and Bassfield. The seven VFDs collectively have 85 firefighters. Equipment includes 15 pumpers, 8 tankers, 3 brush trucks, and 2 rescue vehicles equipped with Jaws of Life. Fire insurance ratings range from 7 to 9.

Marion County is served by six volunteer fire departments. They are Morgantown, Foxworth, Southwest Marion, Tri-Community, South Marion, and Pine Burr. Collectively the county VFDs have 140 firefighters. Equipment includes 16 pumpers, 9 tankers, 3 rescue trucks, 4 brush trucks, and 6 sets of rescue equipment (Jaws of Life). County fire insurance ratings range from 8 to 9.

The City of Columbia's Fire Departments has 20 full-time firefighters. Equipment includes 4 pumpers and one rescue truck. The City Fire Department has a fire insurance class rating of 7.

For security reasons, the Civil Defense office has requested that fire department locations not be listed.

Strategic Goals of the County Wildfire Protection Plan

At the beginning of the planning process, the County CWPP Steering Committee identified several goals. These goals were set to provide a common vision during the process and to identify specific results to be obtained upon completion of the final document.

1. Define the Wildland-Urban Interface (WUI) for BOTH counties
2. Identify and prioritize high-risk areas within the WUI
3. Identify treatment methods for prioritized high risk areas
4. Recommendations to reduce structure ignitability
5. Identify strategies to improve communication and encourage collaboration between the counties and the Mississippi Forestry Commission, including radio communication
6. Recommendation to improve the resources of the Volunteer Fire Departments
 - Better/proper equipment and gear
7. Develop strategies to retain and recruit volunteer firefighters
8. Strengthen subdivision regulations to include guidelines to prevent wildfire occurrence
9. Seek funding for Marion and Jeff Davis County to hire a building inspector
10. Identify education and outreach programs on wildfire prevention for homeowners and developers
11. Identify financial resources that could be used for match money for fire departments to use when applying for grant money
12. Recommendations to increase water sources and access to private water sources

Mapping

The Jefferson Davis County Wildfire Protection Plan contains seven maps created by the Southern Mississippi Planning and Development District (SMPDD) Geographic Information System Department. These maps were created for planning purposes to aid in the assessment of county wildfire occurrence and emergency preparedness. The maps include the Jefferson Davis County Base Map, Jefferson Davis County Risk Assessment Ratings, Jefferson Davis County Fire Data 2001-2007, High Occurrence Wildfire Areas, Arson Fires 2001-2007, Jefferson Davis County Fire Response Area, and Wildfires by Fire Response Area.

The county-wide base map provides a graphic baseline of infrastructure, roadways, inhabited areas, areas of community importance and a WUI designation. Initially, the WUI was set at ½-mile from existing municipal boundaries in accordance with the Healthy Forests Restoration Act of 2003. The Steering Committee then edited this line to include area developments within the county but not adjacent to municipalities. It was noted by the Steering Committee that the county has many areas where wildland meets development. For this reason, the Jefferson Davis County WUI will identify areas where the highest amount of development occurs and aid in identifying specific risk factors and treatment projects that have the potential to reduce the risk to life, property and critical infrastructure.

In addition to the WUI, the Steering Committee identified several areas of critical infrastructure including roadways for evacuation, water towers, utilities and the communication towers. The Base Map has become a visual representation of the core elements of county protection as identified for the CWPP.

The Risk Assessment Map graphically reflects the results of the risk assessment portion of the county wildfire protection plan process. The risk assessment process is explained in detail below. The resulting map reflects the infrastructure, roadways, municipalities and areas of community importance found on the base map. The Steering Committee assigned a risk rating to each of these attributes by considering available fuel load, frequency of wildfire occurrence, vulnerability of development and infrastructure, and emergency preparedness. These ratings were then displayed in map form to better enable review and assessment of the entire county.

Several fire occurrence maps were created from data collected from the Mississippi Forestry Commission (MFC). The data reflect both wildfires and controlled burns, and several different causes of fires. Fire causes include lightning, campfire, smoking, debris burning, arson, and equipment use. Mississippi Forestry Commission data for Jefferson Davis County shows a total of 34 fires in the year 2001, 75 fires in 2002, 68 fires in 2003, 114 fires in 2004, 147 fires in 2005, 191 fires in 2006, and 89 fires in 2007. The fire occurrence maps were utilized in the Risk Assessment portion of the CWPP and as a valuable reference during the process of formulating mitigation projects and action items.

Through the use of the SMPDD Geographic Information System, all fires and all causes, tracked for years 2001-2007 by the MFC, are reflected on the Jefferson Davis County Wildfires 2001-2007 map. When these data are mapped, it becomes apparent that there are specific geographic areas where there is a high occurrence of wildfire.

The High Occurrence Wildfire Areas are based on a computer calculation used to determine density and distribution by comparing each fire occurrence to its surrounding neighbors. The resulting calculation was then separated into nine classes to isolate areas with higher density. The lowest six classes were eliminated, and the remaining three classes were converted to single polygons to represent the eight regions displayed as high occurrence areas. The regions were then manually edited to exclude fringe incidents leading to distinct and cohesive boundaries. Area 1 is geographically located in the northwest portion of the county along an area of Highway 42. Area 2 is a large area running east-west geographically located centrally in the county covering the majority of Prentiss and Highway 84. Area 3 is located southwest of the Progress community on the west county boundary. Area 4 is located south of Prentiss with its northeastern border skirting Jeff Davis Lake and Highway 42. Area 5 is north of Bassfield along Highway 35. Area 6 is located south of Prentiss in the South Lily Rose Rd area and Highway 13. Area 7 is a small area located in the south-central portion of the county just north of Greens Creek Rd in the area of Wiley Dyes Rd and Clarence Lott Dr. Area 8 is a large area located in the south east corner of the county running east and south of Bassfield.

A majority of the fires within Jefferson Davis County, approximately 51%, are attributed to debris burning and 29% attributed to arson. According to Forestry Commission wildfire data, 367 fires were attributed to debris burning and 210 fires were attributed to arson out of 718 fires tracked from 2001-2007. The map of Arson Fires by Year reflects the geographic distribution of arson fires throughout the county.

The Jefferson Davis County Fire Response Areas map reflects the county emergency service areas with respective boundaries, as well as each volunteer fire station location. Also included is a map reflecting all wildfires from 2001-2007 as well as emergency service area boundaries and the department locations. Wildfires 2001-2007 by Fire Response Area will aid in the assessment of numbers of fires and their general location within each district.

The Marion County Wildfire Protection Plan contains seven maps created by the Southern Mississippi Planning and Development District (SMPDD) Geographic Information System Department. These maps were created for planning purposes to aid in the assessment of county wildfire occurrence and emergency preparedness. The maps include the Marion County Base Map, Marion County Risk Assessment Ratings, Marion County Fire Data 2001-2007, High Occurrence Wildfire Areas, Arson Fires 2001-2007, Marion County Fire Response Area, and Wildfires by Fire Response Area.

The county-wide base map provides a graphic baseline of infrastructure, roadways, inhabited areas, areas of community importance and a WUI designation. Initially, the WUI was set at ½-mile from existing municipal boundaries in accordance with the Healthy Forests Restoration Act of 2003. The Steering Committee then edited this line to include area developments within the county but not adjacent to municipalities. It was noted by the Steering Committee that the county has many areas where wildland meets development. For this reason, the Marion County WUI will identify areas where the highest amount of development occurs and aid in identifying specific risk factors and treatment projects that have the potential to reduce the risk to life, property and critical infrastructure.

In addition to the WUI, the Steering Committee identified several areas of critical infrastructure including roadways for evacuation, water towers, utilities and the communication towers. The Base Map has become a visual representation of the core elements of county protection as identified for the CWPP.

The Risk Assessment Map graphically reflects the results of the risk assessment portion of the county wildfire protection plan process. The risk assessment process is explained in detail below. The resulting map reflects the infrastructure, roadways, municipalities and areas of community importance found on the base map. The Steering Committee assigned a risk rating to each of these attributes by considering available fuel load, frequency of wildfire occurrence, vulnerability of development and infrastructure, and emergency preparedness. These ratings were then displayed in map form to better enable review and assessment of the entire county.

Several fire occurrence maps were created from data collected from the Mississippi Forestry Commission (MFC). The data reflect both wildfires and controlled burns, and several different causes of fires. Fire causes include lightning, campfire, smoking, debris burning, arson, and equipment use. Mississippi Forestry Commission data for Marion County shows a total of 9 fires in the year 2001, 76 fires in 2002, 82 fires in 2003, 109 fires in 2004, 169 fires in 2005, 279 fires in 2006, and 93 fires in 2007. The fire occurrence maps were utilized in the Risk Assessment portion of the CWPP and as a valuable reference during the process of formulating mitigation projects and action items.

Through the use of the SMPDD Geographic Information System, all fires and all causes, tracked for years 2001-2007 by the MFC, are reflected on the Marion County Wildfires 2001-2007 map. When these data are mapped, it becomes apparent that there are specific geographic areas where there is a high occurrence of wildfire.

The High Occurrence Wildfire Areas are based on a computer calculation used to determine density and distribution by comparing each fire occurrence to its surrounding neighbors. The resulting calculation was then separated into nine classes to isolate areas with higher density. The lowest six classes were eliminated, and the remaining three classes were converted to single polygons to represent the seven regions displayed as high occurrence areas. The regions were then manually edited to exclude

fringe incidents leading to distinct and cohesive boundaries. Area 1 is geographically located in the north-east portion of the county in the vicinity of Tri-Community VFD Station 4. Area 2 is geographically located north of Columbia encompassing the area along Highways 13 on the west and Highway 35 on the east. Area 3 is located on the east county boundary south of highway 44. Area 4 is located in the west-central portion of the county between the western county boundary and Highway 35 along Highway 98 and north to Highway 586. Area 5 is a large area south of Highway 98 running west from Columbia to the east to the Tri-Community VFD Station 5 area and south from Columbia along Highway 43. Area 6 is located along Highway 35 in the vicinity of South West Marion VFD. Area 7 is located on the east county boundary just north of Highway 13 in the vicinity of Pine Burr VFD.

A majority of the fires within Marion County, approximately 45%, are attributed to arson. According to Forestry Commission wildfire data, 365 out of 817 fires tracked from 2001-2007 were attributed to arson. The map of Arson Fires by Year reflects the geographic distribution of these fires throughout the county.

The Marion County Fire Response Areas map reflects the county fire station response areas with respective boundaries and each volunteer fire station location. Also included is a map reflecting all wildfires from 2001-2007, as well as all fire district boundaries and the department locations. Wildfires 2001-2007 by Fire Response Area will aid in the assessment of numbers of fires and their general location within each district.

County Risk Assessment

Through the County Risk Assessment, fuel hazards, frequency of wildfire occurrence, vulnerability of development and infrastructure, and emergency preparedness were all considered to compile the following list of county areas at risk from wildfire.

The Steering Committee attempted to identify large facilities that may be at risk from wildfire due to their location, function, or potential impact to the community if damaged or lost to wildfire. Once identified, these at-risk areas were prioritized to focus available financial and human resources on specific mitigation projects in the future.

For the purpose of this exercise, these areas were rated from low to high. Areas receiving the highest rating pose an increased risk due to their function, amount of nearby fuel load or may cause significant community impact in the event of damage or loss due to a wildfire. Mitigation projects for the at-risk areas include a wide array of activities. Removal or reduction in fuel load may be suggested for some areas, with a public awareness campaign suggested for others.

There are some facilities that are rated that may be inside the WUI. They were included at the request of the Civil Defense Agency.

Rating Key

- Low
- Medium
- Medium-High
- High

Critical Infrastructure:

- Illinois Central Gulf Railroad
The rail cars run through Marion County from Bogulusa, LA to Moticello, MS twice per day. The risk is low.
- Gloster Southern Railroad
In both Marion and Jefferson Davis County, the risk is low.
- Prentiss-Jefferson Davis County Airport
Risk rating is medium.
- Society Hill Fire Station (Oakvale VFD), Jeff Davis County
Risk rating is medium.
- Good Hope Fire Station (VFD), Jeff Davis County
Risk rating is medium with nearby woodlands.

- Williamson Mill Fire Station (Clem VFD), Jeff Davis County
Risk rating is medium.
- Granby Fire Station (VFD), Jeff Davis County
Risk rating is medium with nearby woodlands.
- Highway 84 West (Oak Grove VFD), Jeff Davis County
The risk is medium.
- Red House Station (Clem VFD), Jeff Davis County
The risk is medium.
- Clem Station (VFD), Jeff Davis County
The risk is medium.
- Highway 84 West (Progress VFD), Jeff Davis County
The risk is medium.
- Jefferson Davis County Vo-Tech, Jeff Davis County
There is a stand of pines behind the facility and it rated medium.
- Good Hope Water Tank, Jeff Davis County
The risk is low.
- Lowland Utility Association, Jeff Davis County
The risk is low.
- Carson Central Water Association, Jeff Davis County
The risk is low.
- Double Pond Water Association, Jeff Davis County
The risk is low.
- NE Jefferson Davis Water Association, Jeff Davis County
The risk is low.
- Lake Jeff Davis Dam, Jeff Davis County
The risk is low.
- Hollday Creek Wastershed Structure 3 Dam, Jeff Davis County
The risk is low.
- Double Ponds Water Tank #2, Jeff Davis County
The risk is low.

- Lily Rose Water-Stand Pipe/Treatment Facility, Jeff Davis County
The risk is low.
- Northeast Jefferson Davis Water Tower, Jeff Davis County
The risk is low.
- West Lamar Water Association, Jeff Davis County
The risk is low.
- Cell South Tower, Jeff Davis County
The risk is medium.
- Microwave Relay Tower, Jeff Davis County
The risk is medium.
- Vo-Tech Tower, Jeff Davis County
The risk is medium.
- Cellular South Microwave Relay Tower, Jeff Davis County
The risk is medium.
- Ham Radio Tower, Jeff Davis County
The risk is medium.
- State Highway Commissioner Tower, Jeff Davis County
The risk is medium.
- Satellite Dishes Tower Site, Jeff Davis County
The risk is medium.
- AT&T Mobility Tower, Jeff Davis County
The risk is medium.
- Verizon Wireless Tower, Jeff Davis County
The risk is medium.
- Antenna Tower, Jeff Davis County
The risk is medium.
- FAA/CLR Tower, Jeff Davis County
The risk is medium.
- Omni Source LLC Tower, Jeff Davis County
The risk is medium.

- Foresite Tower, Jeff Davis County
The risk is medium.
- National Weather Microwave Relay Tower, Jeff Davis County
The risk is medium.
- Cellular South Tower, Jeff Davis County
The risk is medium.
- Tower Ventures Tower, Jeff Davis County
The risk is medium.
- Ham Radio Tower, Jeff Davis County
The risk is medium.
- Microwave Relay Tower, Jeff Davis County
The risk is medium.
- Morgantown VFD, Marion County
The risk is low.
- Tri-Community VFD Station 1, Marion County
The risk is low.
- Tri-Community VFD Station 2, Marion County
The risk is low.
- Tri-Community VFD Station 3, Marion County
The risk is low.
- Tri-Community VFD Station 4, Marion County
The risk is low.
- Tri-Community VFD Station 5, Marion County
The risk is low.
- Foxworth VFD, Marion County
The risk is low.
- South Marion VFD, Lampton Station, Marion County
The risk is low.
- Southwest Marion VFD, Kokomo Station, Marion County
The risk is low.

- Southwest Marion VFD (3), Marion County
The risk is low.
- South Marion VFD, Marion County
The risk is low.
- Masjid Al-Halim-New Medinah Church
The church is listed because it serves as a shelter. However, the risk is low.
- West Marion Water Association, Marion County
The risk is low.
- Magee's Creek Water Association, Marion County
The risk is low.
- Morgantown Water Association, Marion County
The risk is low.
- Hub Water Association, Marion County
The risk is low.
- Lampton Water Association, Marion County
The risk is low.
- Cedar Grove Water Association, Marion County
The risk is low.
- Bunker Hill Water Association, Marion County
The risk is low.
- The Community Water Association, Marion County
The risk is low.
- Improve Water Association, Marion County
The risk is low.
- Highway 98 East Water Association, Marion County
The risk is low.
- Goss Water Associates, Marion County (2)
The risk is low.
- Kokomo/Shiloh Water Association, Marion County
The risk is low.
- Marion Co. Communications Tower West, Marion County
The risk is medium.

- Highway 35 – Pearl River Bridge, Marion County
The risk is low.
- South MS Power Substation, Marion County
Risk rating is medium.

Vulnerable Facilities

- Allegheny Energy Power
- Equine Products, 824 Bass Burkett Road, Bassfield
Facility contains hazardous materials and is located next to a pine tree plantation. The facility is rated high.
- El Paso Natural Gas, Jeff Davis County
The rating is high.
- Privately owned chicken houses throughout both counties
There are a number of chicken farmers throughout the area. There is restricted burning around the chicken houses. However, if they were lost this would heavily impact the economy of both counties. For that reason, the rating is medium.
- New Industrial Park at airport, Marion County
The new park is under development. Currently the only tenant is a trucking company. The risk is low.
- Gas lines throughout both Marion and Jeff Davis County
The risk is medium – high.

Areas of Community Importance

- Long Leaf Trace, Jeff Davis County
This rails to trails project is well maintained and receives a rating of low.
- Prentiss-Jefferson Davis County Airport, Jeff Davis County
Located in the middle of a large field, the risk is low.
- Columbia Training School. The school, mostly wooden structures, is located in a heavily wooded area of young pines. It is rated high.
- John Ford Home. The historic home in Marion County has a moderate fuel load of grass. The risk rating is medium.
- Game Reserve at Lake Columbia and Lake Bill Waller. Both of the areas have a high occurrence of wildfire and are therefore considered high risk.

- Kokomo Head Start, Marion County
Risk rating is medium.

- Hub Head Start, Marion County
Risk rating is medium.

Areas of Concern

- Sandy Hook Estate, Inc., Marion County
The risk is low.

Emergency Preparedness

Emergency preparedness for each of the county volunteer fire departments is continually reviewed and assessed by the Civil Defense office. This assessment involves factors such as equipment availability and age, public protection classification, and manpower.

There are no formal mutual aid agreements outside of the county but it is recommended that the counties form them with neighboring counties.

Fire Districts and municipalities in the State of Mississippi receive a public protection classification through the Mississippi State Rating Bureau (MSRB). This classification is the basis for determining the fire insurance rating for each district. Currently there are 7 fire grading districts in Jeff Davis County and 7 in Marion County.

Mississippi State Rating Bureau Public Protection Classification List

District	County	Class
Granby	Jeff Davis	9
84 West	Jeff Davis	9
Clem	Jeff Davis	9
Good Hope	Jeff Davis	9
Oakvale	Jeff Davis	9
Bassfield	Jeff Davis	8 inside 9 outside
Prentiss	Jeff Davis	7
Morgantown	Marion	10
Foxworth	Marion	9
Southwest Marion	Marion	10
Tri-Community	Marion	8
South Marion	Marion	10
Pine Burr	Marion	10
Columbia	Marion	7

In general, the departments are well-equipped and able to respond to the needs of the area. However, Steering Committee members did identify improvements that could be made to provide better service within the districts. The county would like to purchase brush trucks and have one at each department.

Often times, the local firefighters work side-by-side with the Mississippi Forestry Commission. Generally, there is a good relationship between the two agencies. However, it is suggested that biannual meetings be established to clarify the roles and responsibilities of each agency. These meetings would allow any other inter-agency concerns to be addressed as well as to provide training opportunities and project coordination. MFC is dispatched out of Marion County, so response time is relatively

good. However, radio communication is poor between MFC and the counties. Two-radio radio communication is not possible. This issue needs to be addressed.

Both counties are generally rural and many residents commute to work in nearby cities. Some of the volunteer firefighters find work outside their fire district and have trouble leaving work to respond to a fire call. To help alleviate this problem, it is recommended that a larger volunteer force be recruited. Currently, there are approximately 85 volunteer firefighters in Jeff Davis County and 140 in Marion County.

A community outreach and awareness program may help address some of the manpower issues. Several volunteer fire departments across the county are involved with the local Boy Scouts of America through the explorer program (www.scouting.org/). Many times, BSA can provide program direction, resources, and insurance to cover the department which allows for much more involvement by an explorer scout than a typical youth under 18.

An apprentice firefighter program working with local youth is also an option. While not allowed to fight fires, these youth may be able to gain training through department exercises. The youth would support by providing drinks, supplies or other equipment that is needed on-site. Involvement in the program may then lead to a career as a volunteer firefighter.

Additionally, recruitment kits should be created and kept on-hand for prospective candidates. Recruitment messages can be posted in local newspaper inserts and by placing flyers at local restaurants and other businesses. Adding recruitment information to the county website and local cable service announcements may also be effective.

In addition to the MSRB Rating and manpower issues, equipment status is tracked and assessed. A current listing of large equipment with description and location is provided below. As mentioned earlier, the county is need of brush trucks, a pumper truck and turnout gear. More equipment needs are expected to arise as the existing equipment ages.

County Volunteer Fire Department Equipment List

County	Type of Equipment
Jeff Davis	Pumpers – 15
Jeff Davis	Tankers – 8
Jeff Davis	Brush Trucks – 3
Jeff Davis	Rescue/Jaws of Life – 2
Marion	Pumpers – 16
Marion	Tankers – 9
Marion	Rescue Trucks - 3
Marion	Jaws of Life – 6
Marion	Brush Trucks - 4

Water sources are a major concern in Jeff Davis and Marion County. Five hydrants have been put in but the counties are having difficulty getting permission from private landowners to access water. It is recommended that water resources on private property be identified and that formal agreements for use be pursued.

Mitigation Projects and Structure Ignitability Recommendations

Through the Community Risk Assessment several areas for improvement were identified. Mitigation projects for the at-risk areas may involve removal or reduction in fuel load for some, a public awareness campaign for others, or a combination approach.

No fuel treatment projects for Critical Infrastructure, Vulnerable Facilities or Areas of Community Importance were identified or found to be necessary at this time. These sites are generally well maintained and have moderate to low ignitability potential. However, it is suggested that the county partner with the Mississippi Forestry Commission to work with large, private landowners to identify areas with dead trees, remove them and/or create fire breaks. No specific landowners were named.

Structure ignitability recommendations should be addressed by the county and distributed to homeowners. These recommendations, as condensed from information found at www.firewise.org, are steps that property owners can take to improve the protection and survivability of a structure in the event of a wildfire. It was also recommended by the Steering Committee that a minimum distance between structures should be designated and included in county construction ordinances.

Structure Ignitability Recommendations

County

1. Develop a homeowner education program
2. Home assessments to help residents identify ways to create defensible space
3. Strengthen subdivision regulations

Homeowners

1. Provide a clearing of at least 30 feet around structures for firefighting equipment access
2. Provide a driveway at least 12 feet wide with 13 feet of vertical clearance
3. If home is gated, display a clearly visible address, provide a gate that swings inward and is at least 30 feet off of the main road.
4. Remove "ladder fuels" that can link grasses to tree tops
5. Maintain an irrigation system
6. Prune tree limbs so the lowest is between 6' - 10' from the ground

7. Remove leaf clutter from roof and yard
8. Mow regularly
9. Remove dead and overhanging branches
10. Store firewood away from the house
11. Don't keep combustible materials under decks or elevated porches
12. Make trellises of non-flammable metal
13. Prevent sparks from entering house by covering vents with wire mesh no larger than 1/8"
14. Use construction materials that are fire-resistant or non-combustible when possible
15. Prevent collection of leaf clutter or other combustible materials beneath mobile homes by installing proper skirting

County Ordinance

1. Maintain minimum distance between structures as recommended by the National Fire Protection Association
2. Maintain a minimum radii of outside edge at dead-end turnaround circle of 45 feet to provide for emergency vehicles on both surface ditch and curb/gutter roadways
3. Maintain minimum width standards for subdivision roads and access roads to individual homes per pending subdivision regulations

Min. width of surface ditch roadway with *local* designation: 28 ft.

Min. width of surface ditch roadway with *collector* designation: 34 ft.

Min. width of curb and gutter streets with *local* designation: 27 ft.

Min. width of curb and gutter streets with *collector* designation: 33 ft.

Action Plan and Assessment Strategy

The action plan and assessment strategy portion of the County Wildfire Protection Plan serves to identify roles and responsibilities, determine funding needs, set timetables for carrying out identified activities and measure the plan's effectiveness.

The Action Plan is an outline of the work to be completed. The Assessment Strategy portion of the CWPP will ensure that Mitigation Projects and Action Plan items are accomplished in a timely manner and monitored to measure the project's success.

1. Staggered purchase of brush trucks to be placed at each fire station to better fight wildfires.

Responsibility: Jeff Davis-Marion County Civil Defense, Volunteer Fire Departments, Boards of Supervisors

Funding: \$150,000 each, possibly through Homeland Security or other grant funds

Timetable for Completion: Every 2 years or as grants become available

Expected Outcome: Better access and firefighting capability

Assessment Timetable: Review progress annually

2. Establish biannual meetings between the Mississippi Forestry Commission and the County Volunteer Fire Departments. Get information about prescribed burn areas from the Mississippi Forestry Commission, including maps of what areas have been burned and what areas are planned to be burned. Also relay information on grants through MFC.

Responsibility: Jeff Davis-Marion County Civil Defense and the Mississippi Forestry Commission

Funding: \$0

Timetable for Completion: Implement immediately

Expected Outcome: Improved communication and coordination in the areas of firefighting, training, safety and project management

Assessment Timetable: 2–5 years

3. Create community outreach and education program including mail-out and county website, listing specific fire concerns in the area and steps that homeowners can take to reduce ignitability potential. Include steps that will improve response time such as proper house numbering, signage and access to locked gates at private residences.

Responsibility: Jeff Davis – Marion County Civil Defense in coordination with Mississippi Forestry Commission and local Volunteer Fire Departments

Funding: Homeland Security Fire Safety Grant, possible coordination with local utility or county agency for inclusion in regular mail-out

Timetable for Completion: October 2009, possibly coordinate with Fire Prevention Awareness Month

Expected Outcome: Implementation of Firewise safety measures by homeowners, including an increase in properly assigned and visible residential addressing as well as a decrease in non-compliant residential burns

Assessment Timetable: Winter 2009

4. Community outreach program to educate citizens, specifically young adults (18 years of age and older), about the volunteer firefighter program and its importance. This program could include a high school component where students are made aware of the program so that they might consider serving at some point in the future. Program also to include National Fire Protection Association public service announcements.

Responsibility: Jeff Davis – Marion County Civil Defense, Volunteer Fire Departments, Mississippi Forestry Commission

Funding: Volunteer Fire Departments, grants, Mississippi Forestry Commission

Timetable for Completion: 1-2 times per year, before peak fire seasons.

Expected Outcome: Increased community awareness of the need for volunteer firefighters and increase in volunteer recruitment

Assessment Timetable: Annual review of recruitment efforts and numbers

5. Maintain and update the grants/funding resource list included in CWPP document.

Responsibility: Jeff Davis – Marion County Civil Defense, Southern Mississippi Planning and Development District

Funding: \$0

Timetable for Completion: Yearly

Expected Outcome: Additional grant applications resulting in an increase of grant funds

Assessment Timetable: Review applications v. funding annually

6. Maintain, update and redistribute the CWPP maps to all county departments, volunteer fire departments and other organizations utilizing the document.

Responsibility: Jeff Davis – Marion County Civil Defense and Southern Mississippi Planning and Development District

Funding: \$0

Timetable for Completion: Yearly

Expected Outcome: Increased awareness of fire activity leading to implementation of action plan in an effort toward reduction of fire incidents

Assessment Timetable: Make any additions or changes to maps on an annual basis and interview other organizations to see if the maps make their role in wildfire prevention more effective

7. Identify and map water resources on private property to be accessed to fill up pumpers throughout the county. Obtain formal permission for access.

Responsibility: Jeff Davis – Marion County Civil Defense

Funding: Grant

Timetable for Completion: Summer 2009

Expected Outcome: More access to water to fight wildfires

Assessment Timetable: Summer 2009 – update every 2 years

8. Encourage Mississippi Insurance Commissioner to consider rebate program to allow for home assessments and homeowner mitigation projects (creating defensible space).

Responsibility: Wayne County Emergency Management Agency, Board of Supervisors, Volunteer Fire Departments, Mississippi Forestry Commission

Funding: \$0

Timetable for Completion: Spring 2009

Expected Outcome: More homeowners participating in mitigation activities, lower insurance premiums for homeowners and additional funds for volunteer fire departments

Assessment Timetable: Review progress in May 2009 after legislative session ends

9. Secure funding to for proper water infrastructure at the new industrial property.

Responsibility: Jeff Davis – Marion County Civil Defense, Board of Supervisors, Marion County Economic Development Partnership, Southern Mississippi Planning and Development District, EDA, and USDA Rural Development.

Funding: \$2,500,000 (estimated)

Timetable for Completion: Summer 2009

Expected Outcome: Appropriate water capacity to support fighting woodland fires and industrial fires. Better infrastructure will increase new tenant interest in locating at the park.

Assessment Timetable: Review progress in Summer 2009

10. Draft and execute a mutual aid agreement with neighboring counties include equipment use and manpower.

Responsibility: Jeff Davis – Marion County Civil Defense, Boards of Supervisors

Funding: \$0

Timetable for Completion: Winter 2008

Expected Outcome: Increased ability to fight fires.

Assessment Timetable: Review progress in January 2009

11. Purchase a 5,000 gallon tanker truck to be placed at a central location for multiple users.

Responsibility: Jeff Davis – Marion County Civil Defense, Board of Supervisors, Volunteer Fire Departments

Funding: Unknown, seek grant funding

Timetable for Completion: Winter 2011

Expected Outcome: Water on truck improves firefighting ability

Assessment Timetable: Review progress annually

12. Develop Subdivision Regulations and/or Building Codes for presentation to County Board of Supervisors.

Responsibility: Jeff Davis – Marion County Civil Defense, County Volunteer Fire Departments

Funding: \$0

Timetable for Completion: Present in 2010

Expected Outcome: Will help with accessibility by increasing the width of roads and driveways and increasing the distance between structures.

Assessment Timetable: Review progress toward adoption annually

13. Seek funding for Marion and Jeff Davis County to hire a building inspector.

Responsibility: Jeff Davis – Marion County Civil Defense, Boards of Supervisors

Funding: Mississippi Development Authority; Counties

Timetable for Completion: 2010

Expected Outcome: Enforcement of codes that prevent fire occurrence

Assessment Timetable: Review progress annually

14. Purchase 2 handheld radios for each of the Mississippi Forestry Commission crews so that they may communicate with the volunteers.

Responsibility: Jefferson Davis – Marion County Emergency Management Agency; 911 Commission

Funding: 911 Commission; \$800

Timetable for Completion: Fall 2010

Expected Outcome: Better radio communication with the MFC

Assessment Timetable: Annually after budget approval

Potential Funding Sources

1. Assistance to Firefighters Grant Program
Website: www.firegrantsupport.com
Application Period: Spring 2009
Program Description: Funding for training, equipment, vehicles, firefighter health and safety program and operations
2. Fire Prevention and Safety (FP&S) Grant Program
Website: www.firegrantsupport.com
Application Period: Fall 2008
Program Description: Outreach to high risk target groups including children, seniors and firefighters. Monitor website for further information on eligible activities
3. Staffing for Adequate Fire and Emergency Response (SAFER) Grant Program
Website: www.firegrantsupport.com
Application Period: Summer 2009
Program Description: Funding for the hiring of fire personnel and incentives for volunteer recruitment and retention
4. USDA Rural Development Community Facilities Grant Program
Website: www.rurdev.usda.gov
Application Deadline: Contact local USDA Representative
Program Description: Funding for assistance in developing an essential community facility. Funds can be used to construct, enlarge, or improve community facilities for health care, public safety and community and public services.
5. U.S. Smokeless Tobacco Company Polaris Ranger Donation Program
Website: www.ustinc.com
Application Period: October 2008
Program Description: Donation of Polaris Ranger 6X6 utility vehicles for firefighting, rescue, police, emergency medical service, and wildlife law enforcement organizations.
6. Responder Knowledge Base Website
Website: www.rkb.us/
Program Description: Website contains information on currently available products, standards, training and grants
7. Firegrantshelp.com Website
Website: www.firegrantshelp.com
Program Description: Website contains information on resources for Fire and EMS assistance

References

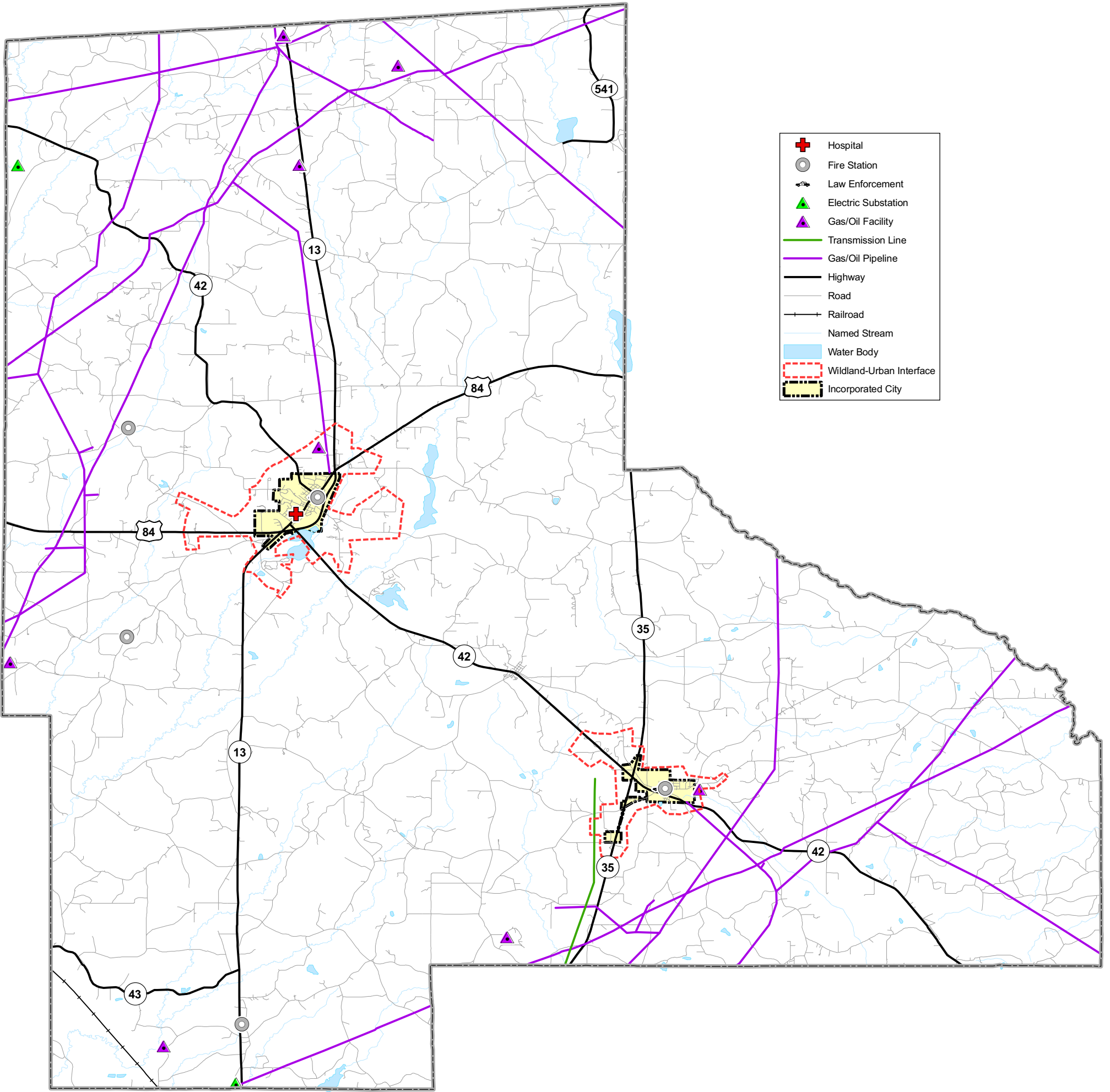
1. Marion County Hazard Mitigation Plan (under review)
Jefferson Davis County Hazard Mitigation Plan (under review)
2. Marion – Jeff Davis County Comprehensive Emergency Management Plan
3. Firewise
Around Your Home brochure
www.firewise.org
4. USDA Forest Service
Preparing a Community Wildfire Protection Plan
March 2004

Project Contact Information

1. Marion-Jeff Davis County Civil Defense
502 Courthouse Square
Columbia, MS 39429
Phone: (601) 736-9627
Fax: (601) 736-0813

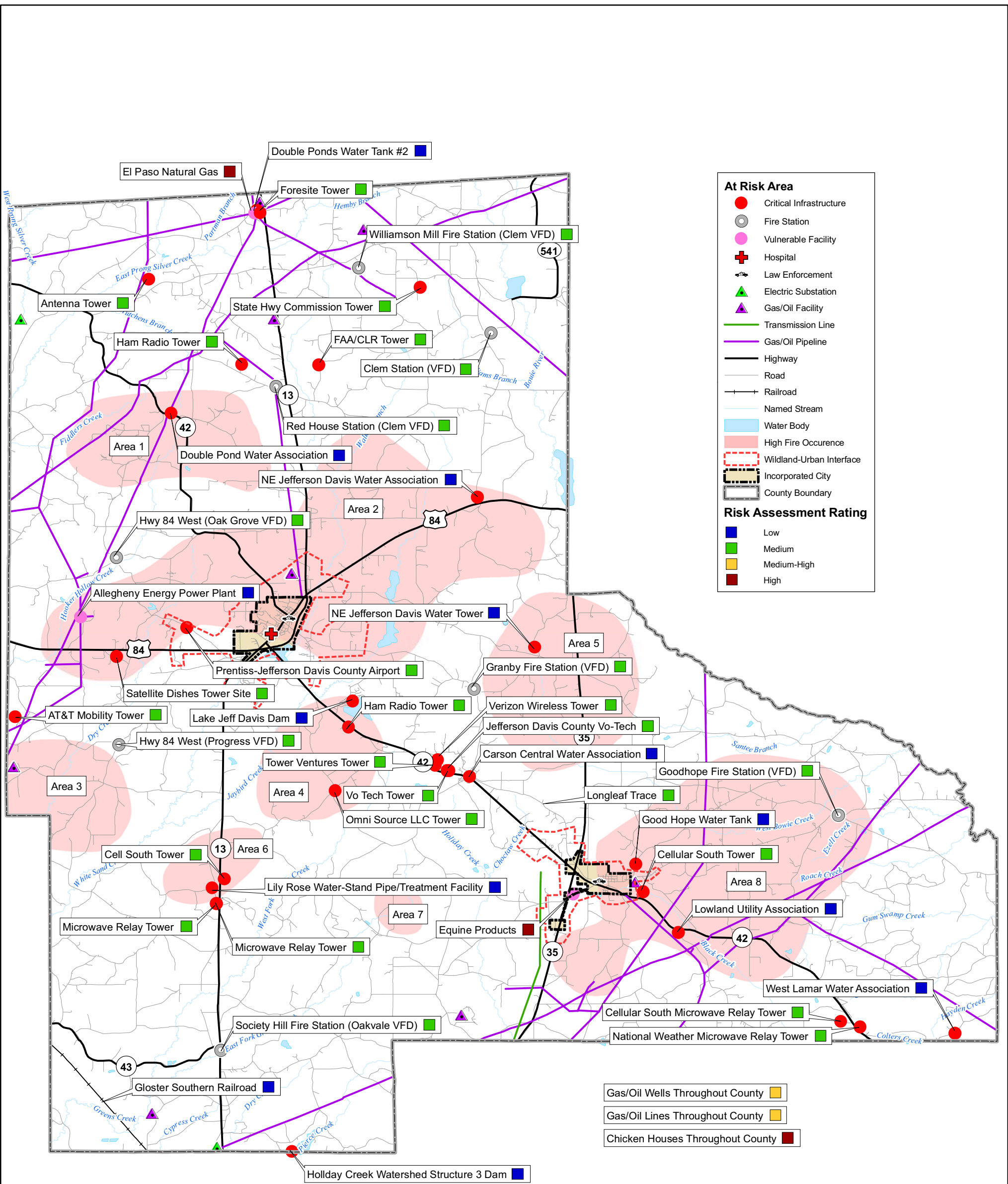
2. Mississippi Forestry Commission
477 South Gate Road
Hattiesburg, MS 39401
Phone: (601) 583-4240
Fax: (601) 583-2500
www.mfc.state.ms.us

3. Southern Mississippi Planning and Development District
9229 Highway 49
Gulfport, MS 39503
Phone: (228) 868-2311
Fax: (228) 868-7094
www.smpdd.com



- + Hospital
- Fire Station
- ⚓ Law Enforcement
- ▲ Electric Substation
- ▲ Gas/Oil Facility
- Transmission Line
- Gas/Oil Pipeline
- Highway
- Road
- Railroad
- Named Stream
- Water Body
- Wildland-Urban Interface
- Incorporated City

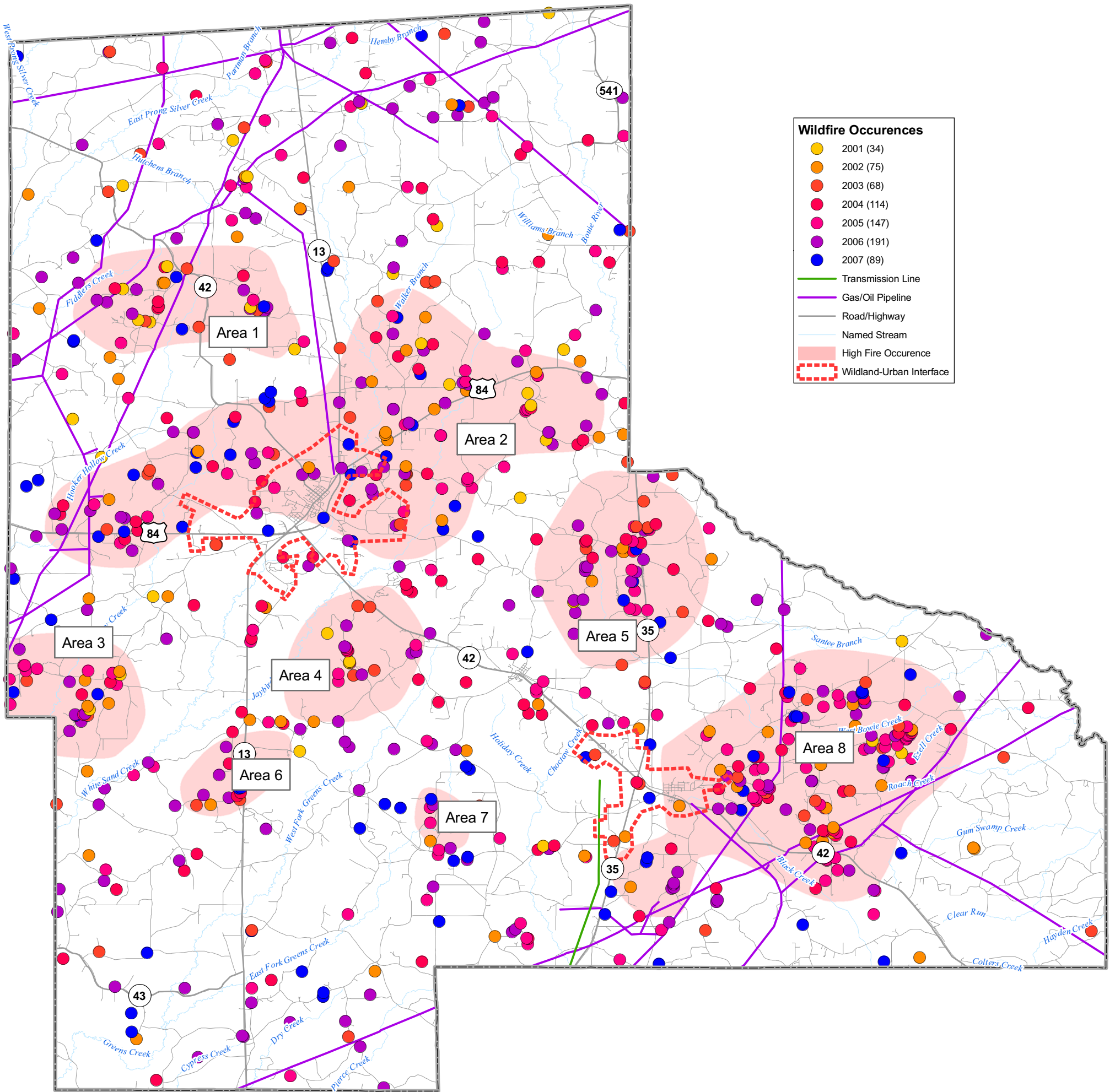
Jefferson Davis County, Mississippi
 Wildfire Protection Plan
 Base Map



Jefferson Davis County, Mississippi

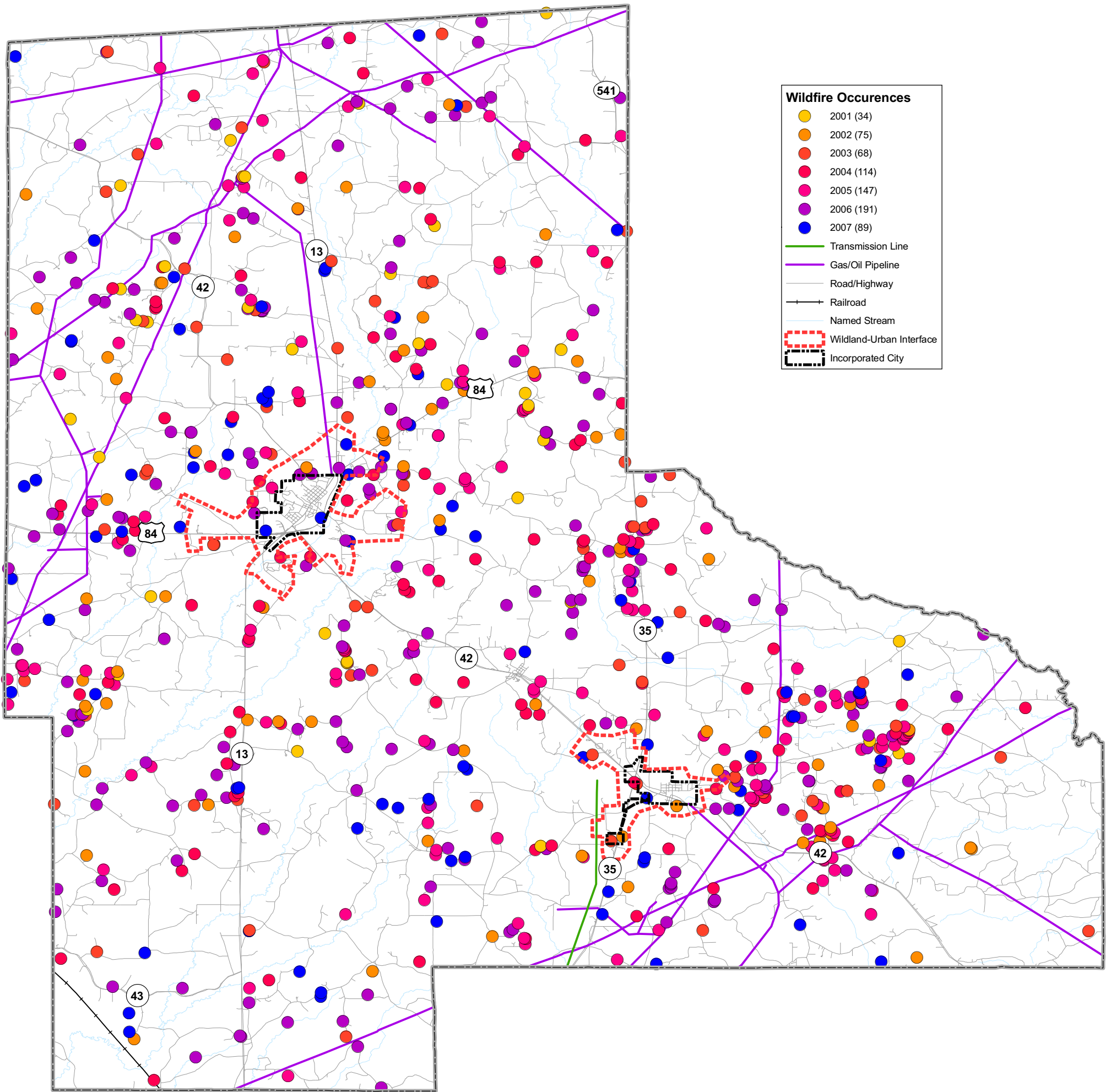
Wildfire Protection Plan

Risk Assessment Ratings



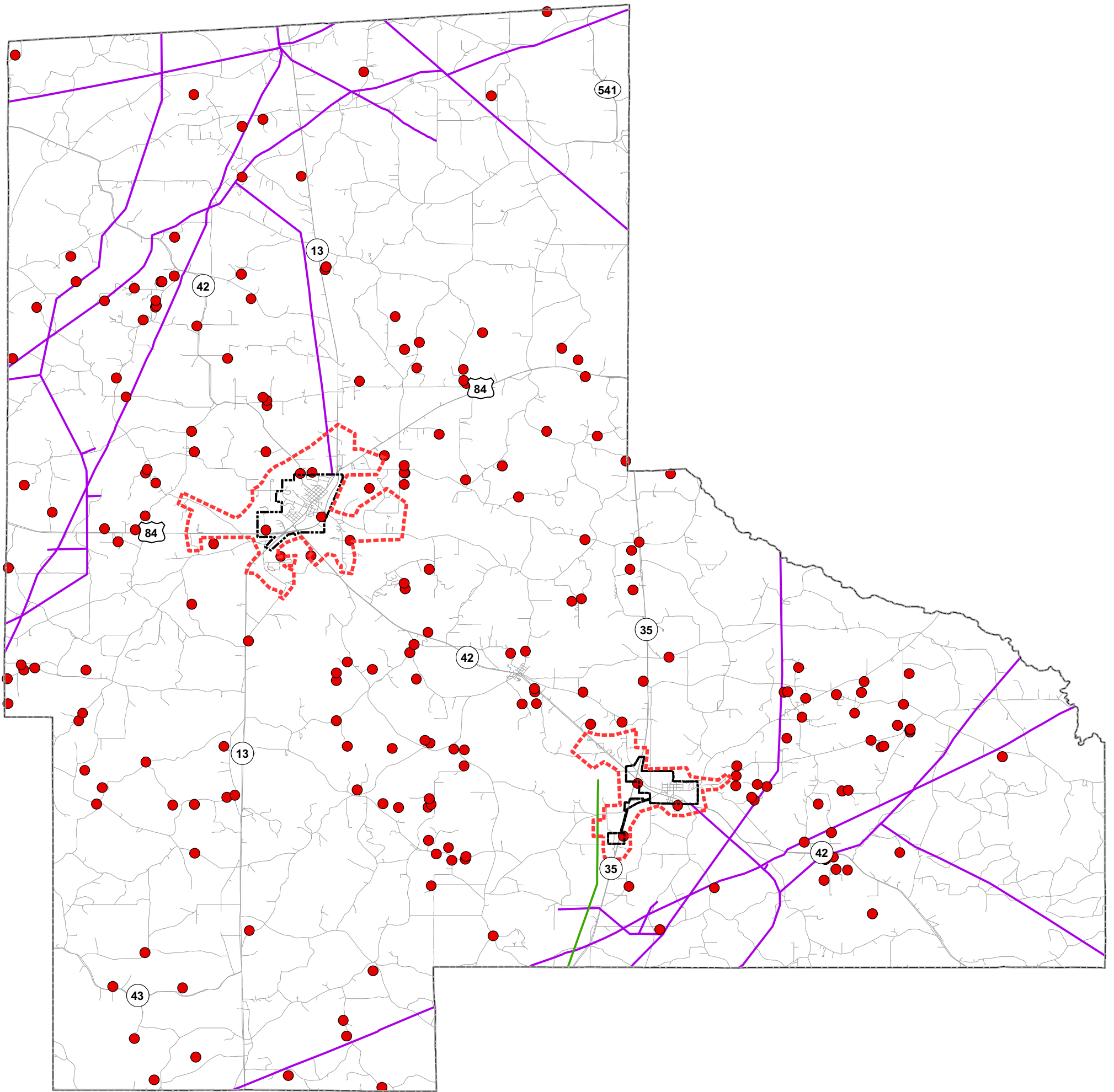
Jefferson Davis County, Mississippi

Wildfire Protection Plan High Occurrence Wildfire Areas



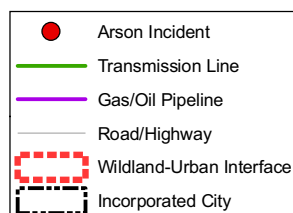
Jefferson Davis County, Mississippi

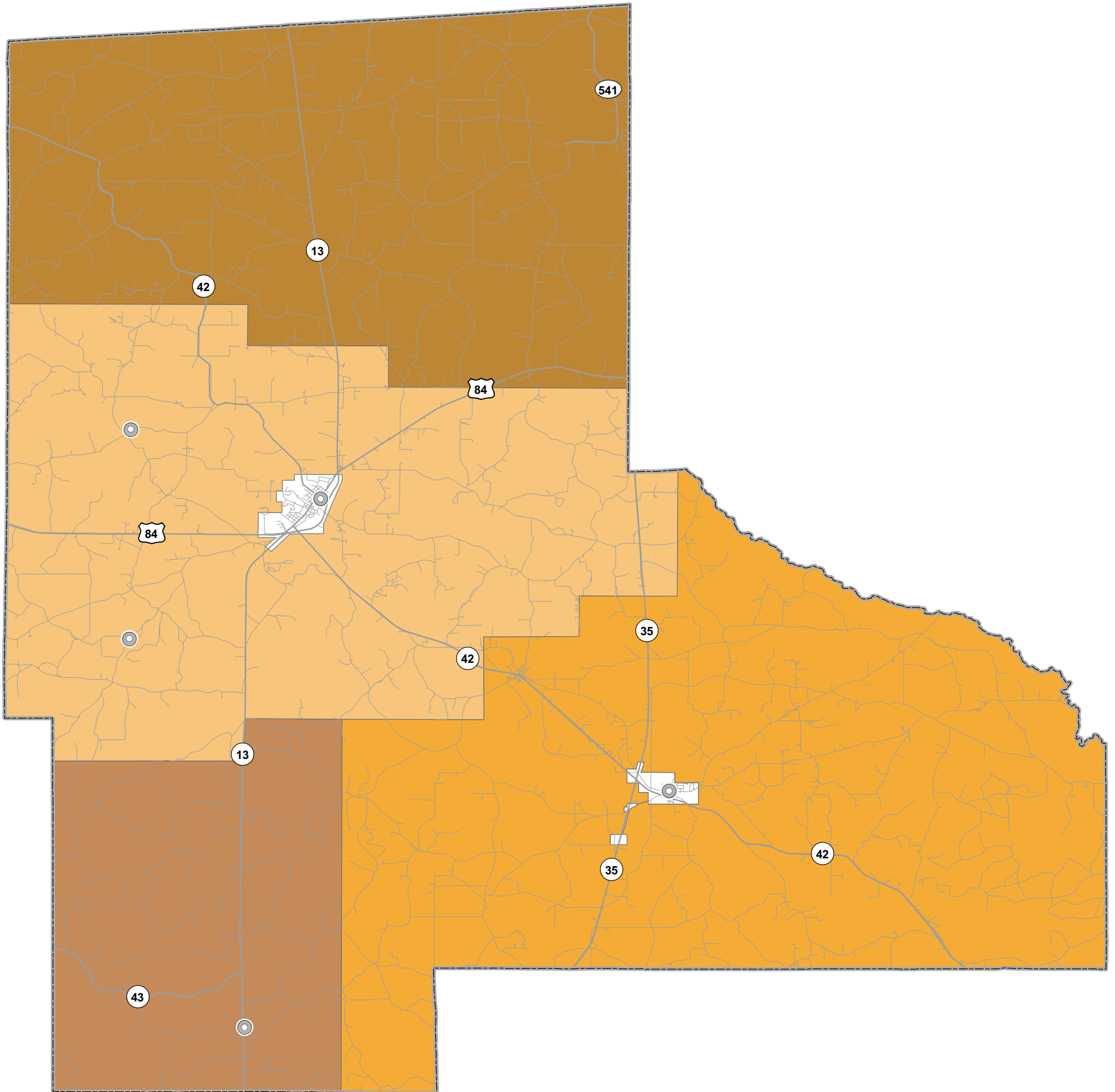
Wildfire Protection Plan Fire Data 2001 - 2007



Jefferson Davis County, Mississippi

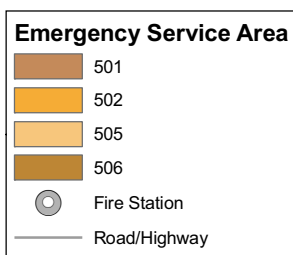
Wildfire Protection Plan Arson Fires 2001 - 2007

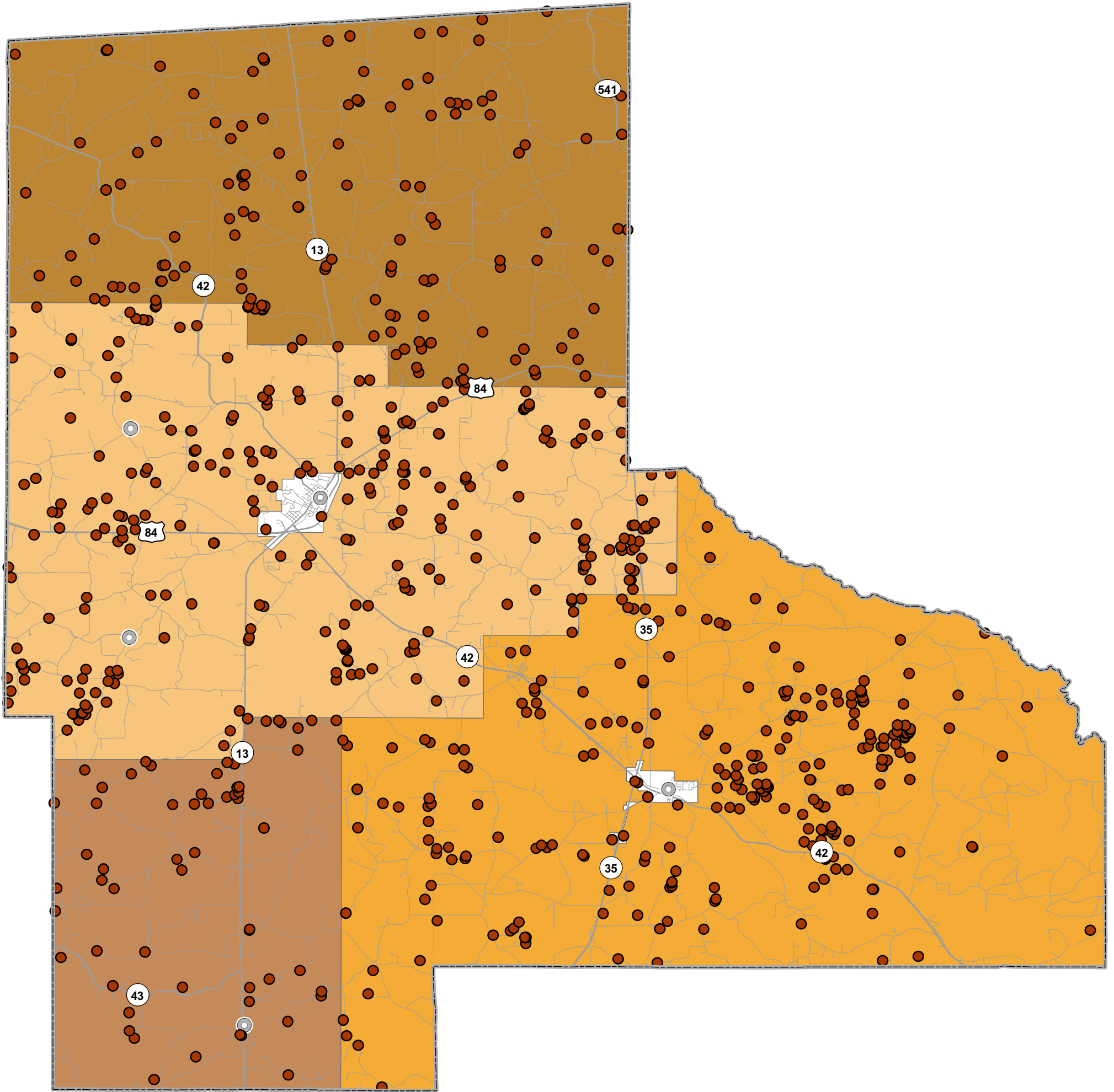




Jefferson Davis County, Mississippi

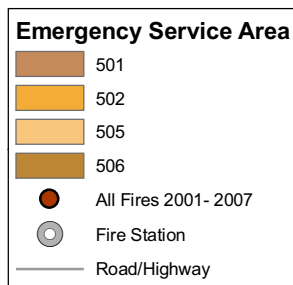
Wildfire Protection Plan Fire Response Areas





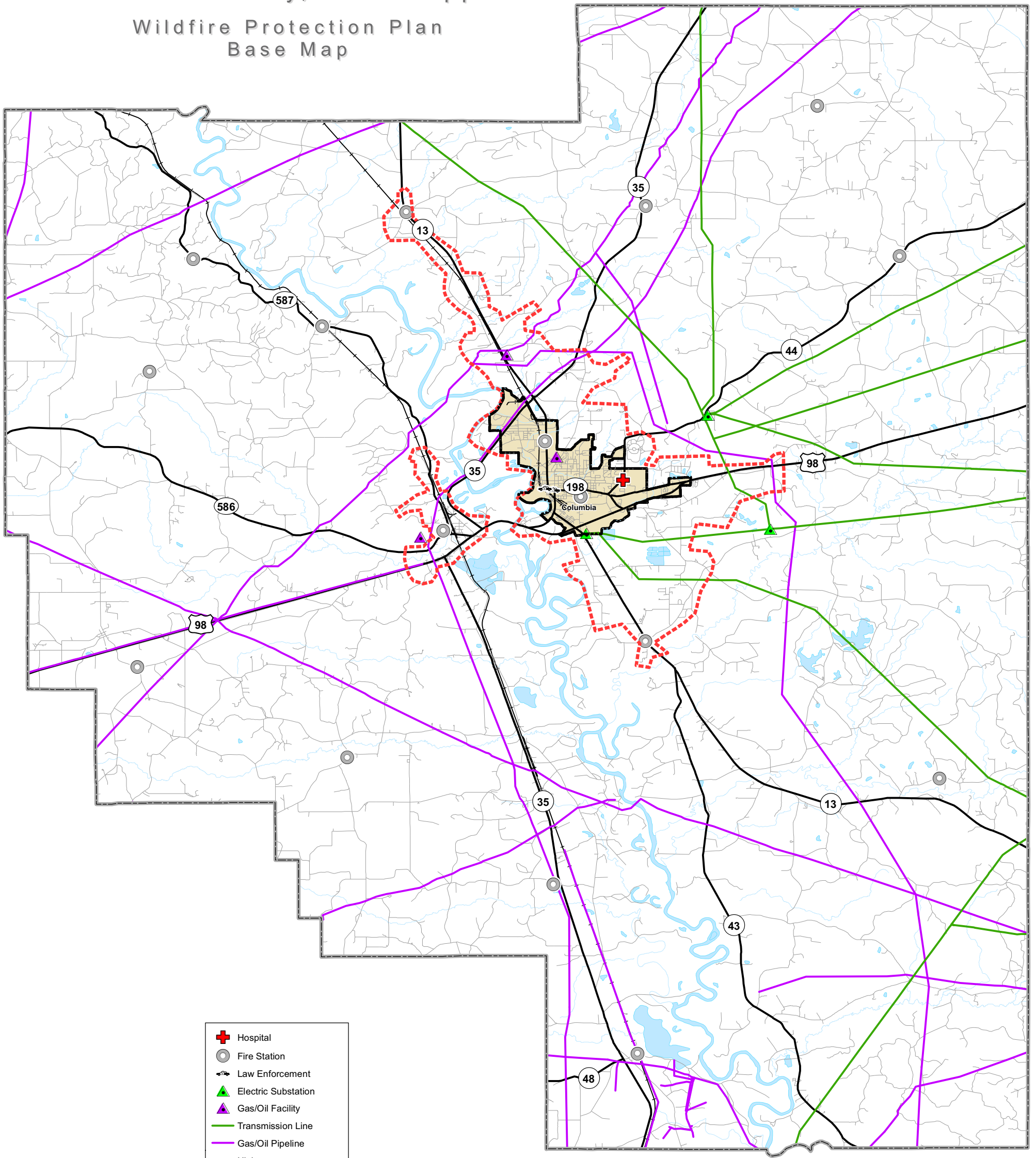
Jefferson Davis County, Mississippi

Wildfire Protection Plan Wildfires by Response Area



Marion County, Mississippi

Wildfire Protection Plan Base Map

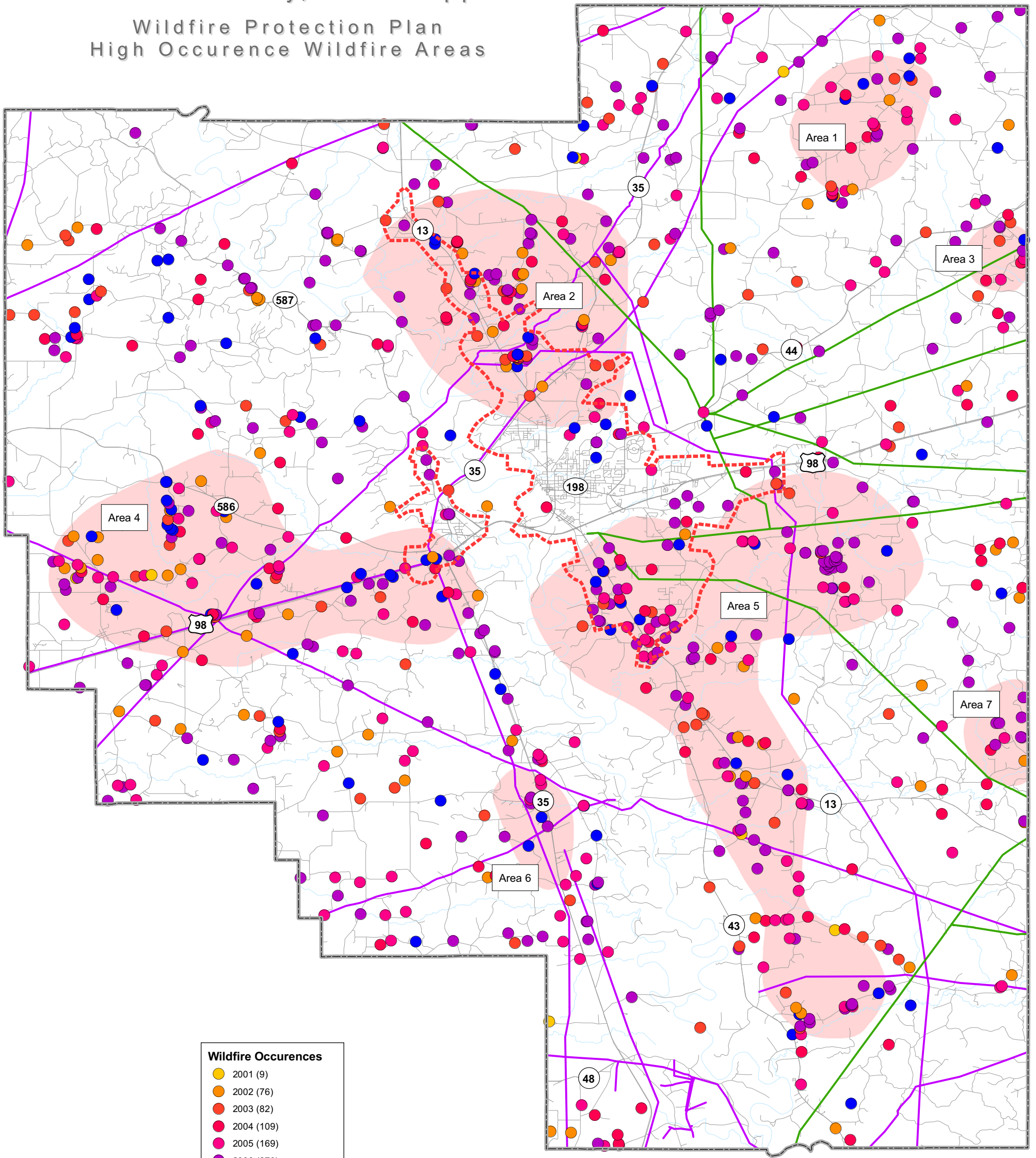


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Marion County, Mississippi

Wildfire Protection Plan High Occurrence Wildfire Areas



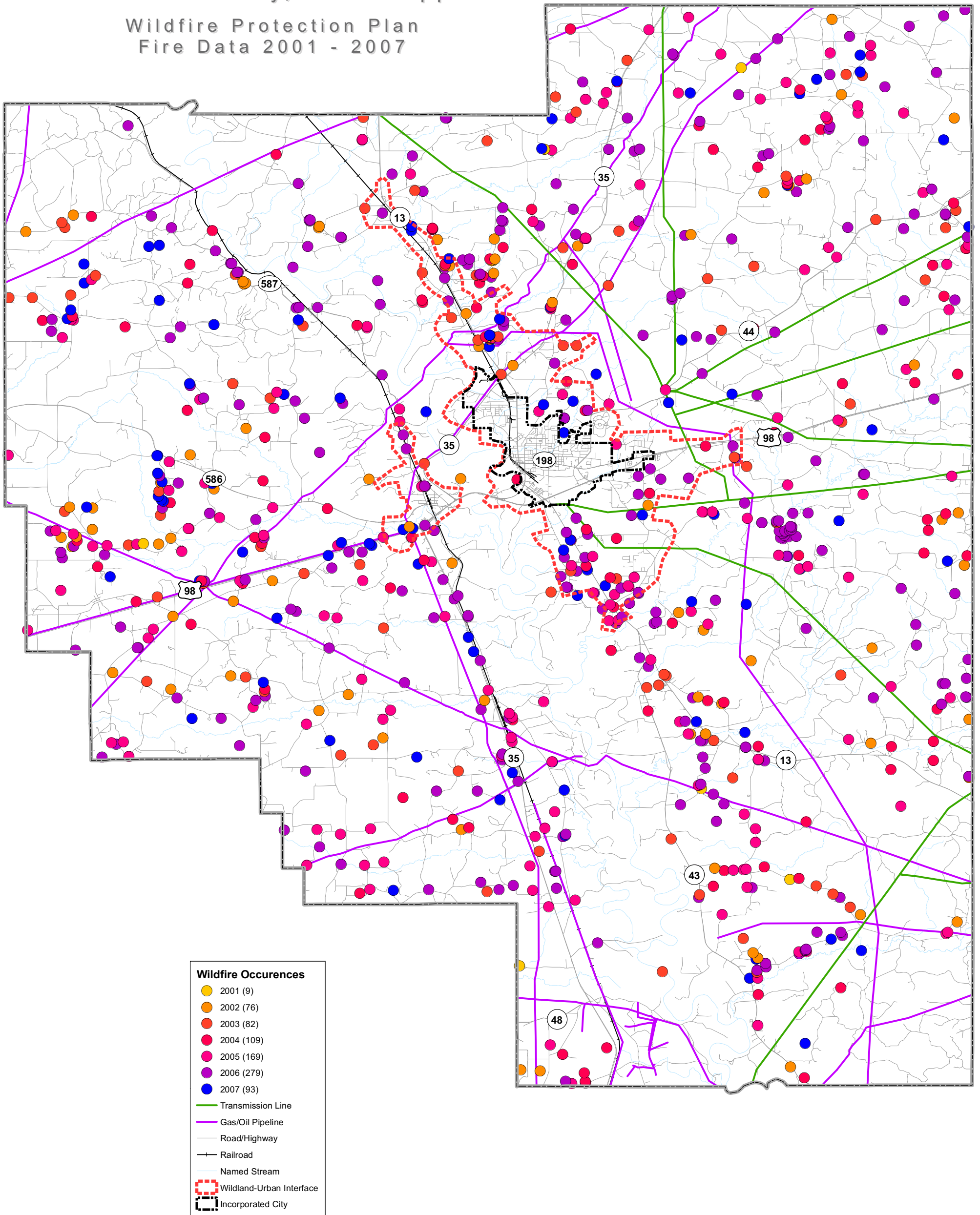
Wildfire Occurrences

- 2001 (9)
- 2002 (76)
- 2003 (82)
- 2004 (109)
- 2005 (169)
- 2006 (279)
- 2007 (93)

- Transmission Line
- Gas/Oil Pipeline
- Road/Highway
- Named Stream
- High Fire Occurrence
- ▭ Wildland-Urban Interface

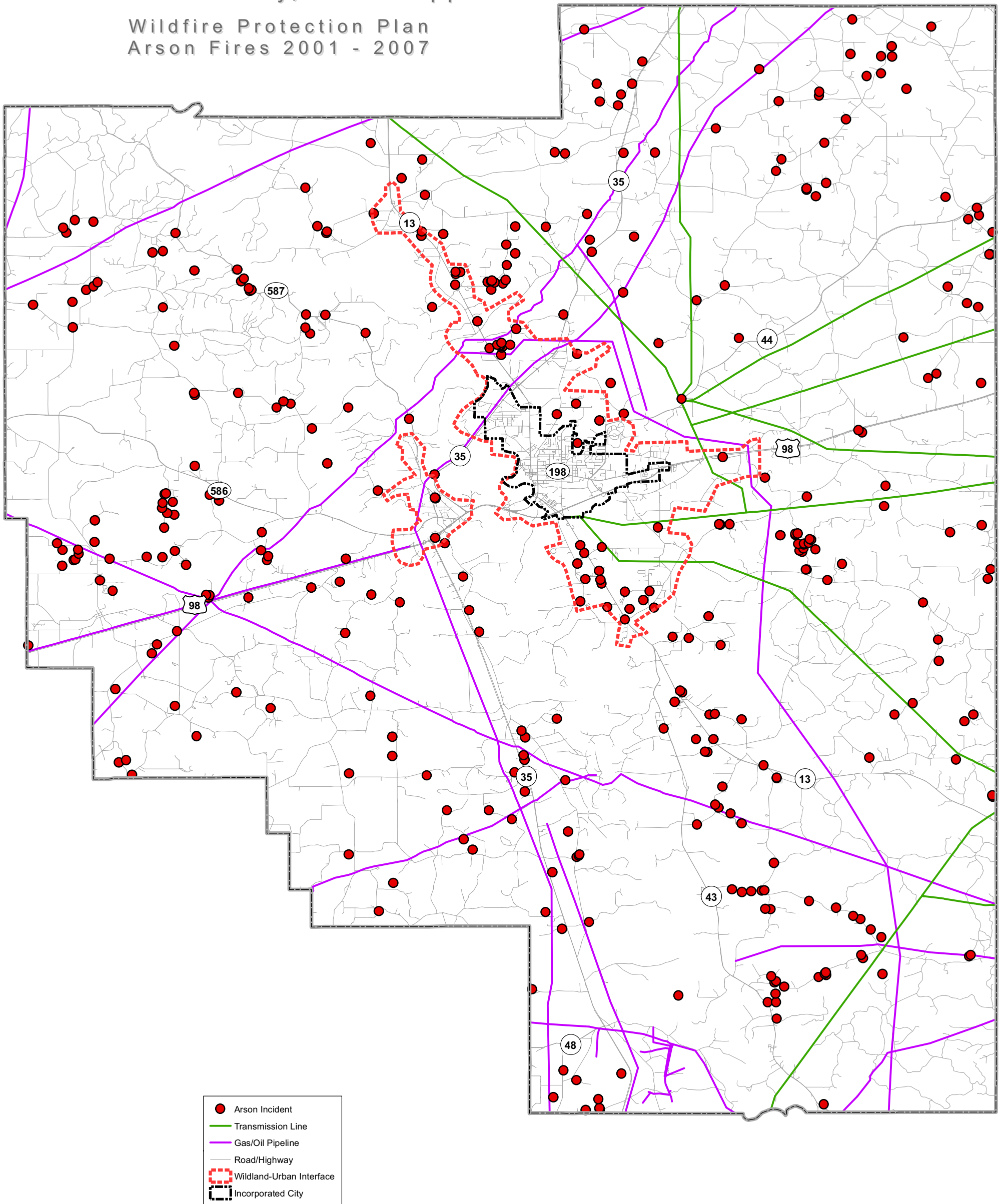
Marion County, Mississippi

Wildfire Protection Plan Fire Data 2001 - 2007



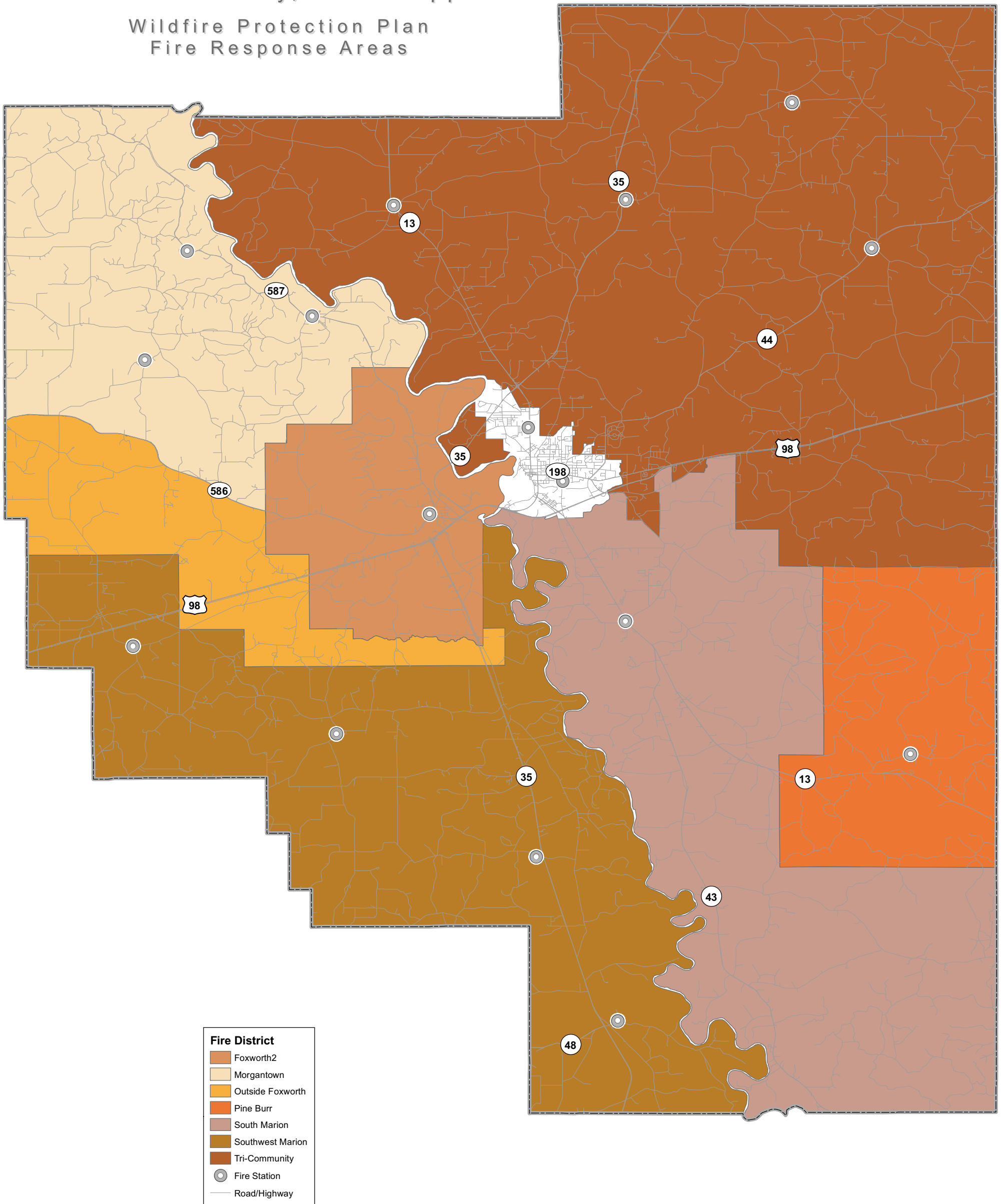
Marion County, Mississippi

Wildfire Protection Plan Arson Fires 2001 - 2007



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